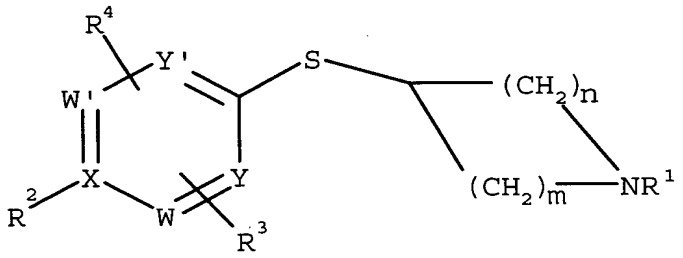
Amendments to the Claims

1. (original) A method of treatment of a condition indicating treatment with a beta 4 subtype selective nicotinic acetylcholine receptor modulator comprising administering an effective amount of a compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R^1 is -H,

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio, or aryl-C_{1-4}alkyl;

R^2 is -H,

-OH,

$-C(O)-NH_2$,

$-NH_2$,

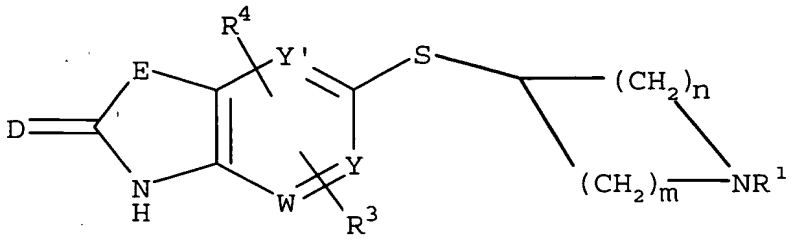
-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or $-SO_2-$;

V is H, aryl, aryl-C_{1-12}alkyl, diaryl-C_{1-12}alkyl, lactonyl, or C_{1-18}alkyl optionally substituted with halogen, hydroxyl, C_{1-4}alkoxy, -C(O)OC_{1-4}alkyl, -OC(O)C_{1-4}alkyl, aryl-C_{1-4}alkoxy, aryloxy, or SO_2C_{1-4}alkyl; and

T is H, halogen, C_{1-5}alkyl, C_{1-4}alkoxy, nitro, aryl, aryl-C_{1-4}alkyl, or aryloxy unless V is H in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein D is O or S; and

E is O, S, NR^5, $C(R^5)_2$, O-CR^5_2, NR^5-CR^5_2, NR^5-CO, CR^5_2-O, CR^5_2-$S(O)_r$, CR^5_2-NR^5, CR^5_2-CR^5_2, CO-NR^5, or CR^5=CR^5;

unless X is N in which case R^2 is absent

R^3 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-, $-CO_2H$, $-NH_2$, NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^4 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-, $-CO_2H$, $-NH_2$, NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^5 is each independently H or C_{1-4}alkyl;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C, R^3 and R^4 are H and R^1 is selected from H,

unsubstituted C_{1-4}alkyl and unsubstituted C_{3-4}cycloalkyl, R^2 may not be –OH;

when one of X, Y and Y' is N, R^3 and R^4 are H and R^1 is selected from H, unsubstituted C_{1-4}alkyl and unsubstituted C_{3-4}cycloalkyl, R^2 may not be H.

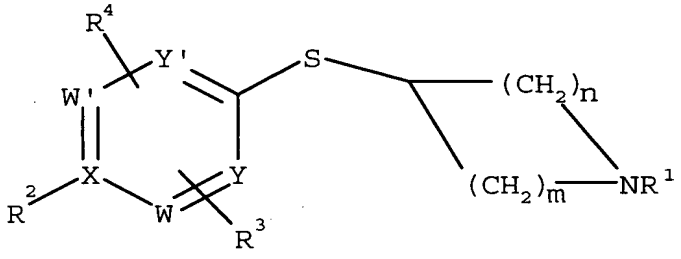
2. (original) The method of claim 1

provided that

when X, W, W', Y and Y' are all C and R^3 and R^4 are H, R^2 may not be –OH; and that

when one of X, Y and Y' is N and R^3 and R^4 are H, R^2 may not be H.

3. (original) A method of treatment of dysfunctions of the central and autonomic nervous systems comprising administering an effective amount of a compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R^1 is -H,

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio, or aryl-C1-4alkyl;

R^2 is -H,

-OH,

$-C(O)-NH_2$,

$-NH_2$,

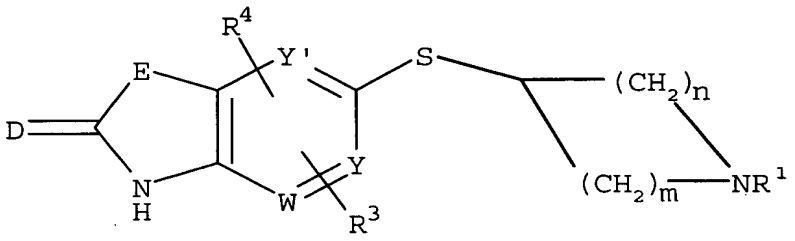
-NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or $-SO_2-$;

V is H, aryl, aryl-C_{1-12}alkyl, diaryl-C_{1-12}alkyl, lactonyl, or C_{1-18}alkyl optionally substituted with halogen, hydroxyl, C_{1-4}alkoxy, $-C(O)OC_{1-}$

$_4$alkyl, -OC(O)C_{1-4}alkyl, aryl-C_{1-4}alkoxy, aryloxy, or SO_2C_{1-4}alkyl; and

T is H, halogen, C_{1-5}alkyl, C_{1-4}alkoxy, nitro, aryl, aryl-C_{1-4}alkyl, or aryloxy unless V is H in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein D is O or S; and

E is O, S, NR^5, $C(R^5)_2$, O-CR^5_2, NR^5-CR^5_2, NR^5-CO, CR^5_2-O, CR^5_2-$S(O)_r$, CR^5_2-NR^5, CR^5_2-CR^5_2, CO-NR^5, or CR^5=CR^5;

unless X is N in which case R^2 is absent

R^3 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-, $-CO_2H$, $-NH_2$, NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^4 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-, $-CO_2H$, $-NH_2$, NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^5 is each independently H or C_{1-4}alkyl;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C and R^3 and R^4 are H, R^2 may not be –OH;

and that

when one of X, Y and Y' is N and R^3 and R^4 are H, R^2 may not be H;

and that

when R^2 is H, OH or NH_2 and R^3 and R^4 are H, R^1 may not be aryl-C1-4alkyl.

4. (original) The method of any one of claims 1 to 3 wherein

R^1 is -H, or

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio.

5. (currently amended) The method of any one of claims 1 to [[4]] 3, wherein

R^2 is -H,

-C(O)-NH_2,

-NH_2,

-NH-Q-V-T as defined in claim 1; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 1;

unless X is N in which case R^2 is absent.

6. (currently amended) The method of any one of claims 1 to [[5]] 3, wherein

R^2 is -C(O)-NH_2,

-NH-Q-V-T as defined in claim 1; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 1;

unless X is N in which case R^2 is absent.

7. (currently amended) The method of any one of claims 1 to [[6]] 3, wherein

R^2 is -C(O)-NH_2,

-NH-Q-V-T, wherein Q is -C(O)-NH-, or -C(O)O-;

V is as defined in claim 1; and

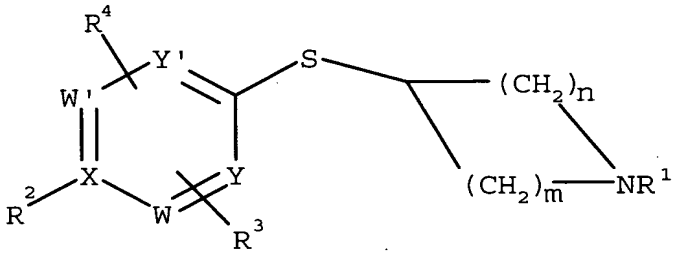
T is as defined in claim 1; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 1;

unless X is N in which case R^2 is absent.

Claims 8 – 12 (canceled)

13. (original) A compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R^1 is -H,

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio, or aryl-C1-4alkyl;

R^2 is -H,

-OH,

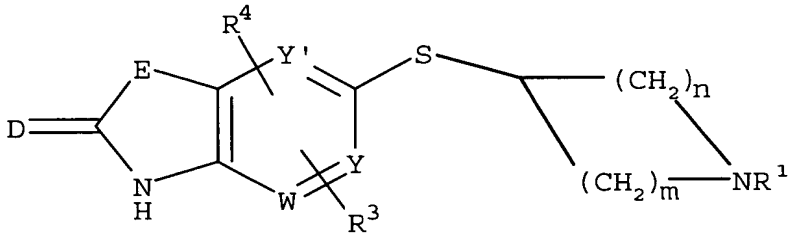
$-C(O)-NH_2$,

$-NH_2$,

-NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or $-SO_2-$;
V is H, aryl, aryl-C_{1-12}alkyl, diaryl-C_{1-12}alkyl, lactonyl, or C_{1-18}alkyl optionally substituted with halogen, hydroxyl, C_{1-4}alkoxy, $-C(O)OC_{1-4}$alkyl, $-OC(O)C_{1-4}$alkyl, aryl-C_{1-4}alkoxy, aryloxy, or SO_2C_{1-4}alkyl; and

T is H, halogen, C_{1-5}alkyl, C_{1-4}alkoxy, nitro, aryl, aryl-C_{1-4}alkyl, or aryloxy unless V is H in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein D is O or S; and

E is O, S, NR^5, $C(R^5)_2$, O-CR^5_2, NR^5-CR^5_2, NR^5-CO, CR^5_2-O, CR^5_2-$S(O)_r$, CR^5_2-NR^5, CR^5_2-CR^5_2, CO-NR^5, or CR^5=CR^5;

unless X is N in which case R^2 is absent

R^3 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-, $-CO_2H$, $-NH_2$, NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^4 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-, $-CO_2H$, $-NH_2$, NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^5 is each independently H or C_{1-4}alkyl;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C and R^3 and R^4 are H, R^2 may not be –OH;

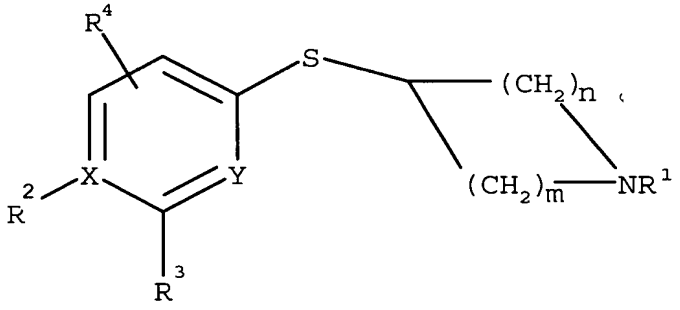
and that

when one of X, Y and Y' is N and R^3 and R^4 are H, R^2 may not be H;

and that

when R^2 is H, OH or NH_2 and R^3 and R^4 are H, R^1 may not be aryl-C1-4alkyl;

and excluding compounds represented by Formula I'' or pharmaceutically acceptable salts thereof:



(I'')

wherein:

R^1, X, Y, m and n are as defined above

R^2 is -H,

$-NH_2$,

-NH-Q-V-T, wherein Q is -C(O)- or $-SO_2-$ and

V and T are as defined above;

unless X is N in which case R^2 is absent

R^3 is H, halogen, C_{1-4}alkyl, OC_{1-4}alkyl, $-NH_2$, NH-C_{1-4}alkyl, or hydroxy;

R^4 is H, halogen, C_{1-4}alkyl, OC_{1-4}alkyl, CO_2H, $-NH_2$, NH-C_{1-4}alkyl, or hydroxy.

14. (original) A compound as claimed in claim 13 wherein

R^1 is -H, or

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio.

15. (original) A compound as claimed in claim 13 or claim 14, wherein

R^2 is -H,

-C(O)-NH_2,

-NH_2,

-NH-Q-V-T as defined in claim 13; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 13;

unless X is N in which case R^2 is absent.

16. (currently amended) A compound as claimed in any one of claims 13 to [[15]] 14, wherein

R^2 is -C(O)-NH_2,

-NH-Q-V-T as defined in claim 13; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 13;

unless X is N in which case R^2 is absent.

17. (currently amended) A compound as claimed in any one of claims 13 to [[16]] 14, wherein

R^2 is -C(O)-NH_2,

-NH-Q-V-T, wherein Q is -C(O)-NH-, or -C(O)O-;

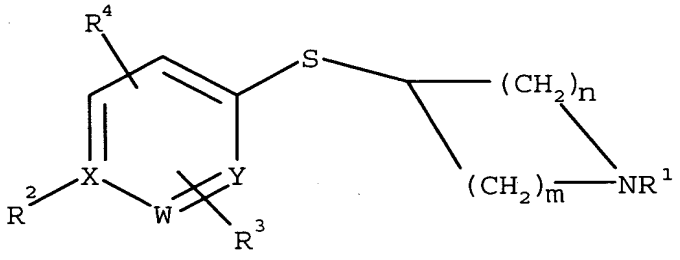
V is as defined in claim 13; and

T is as defined in claim 13; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 13;

unless X is N in which case R^2 is absent.

18. (original) A compound as claimed in claim 13 which is represented by Formula (II) or pharmaceutically acceptable salts thereof:



(II)

wherein:

R^1 is -H; or

C_{1-12} alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4} alkoxy or C_{1-4} alkylthio; or

aryl-C_{1-4} alkyl;

R^2 is –H;

–OH;

-C(O)-NH_2

-NH_2;

-NH-Q-V-T

Q is -C(O)-;

-C(O)-NH-;

-C(O)O-; or

-SO_2-

V is aryl;

aryl-C_{1-12} alkyl;

diaryl-C_{1-12} alkyl;

lactonyl; or

C_{1-18} alkyl optionally substituted with halogen, hydroxyl, C_{1-4} alkoxy, -C(O)OC_{1-4} alkyl, -OC(O)C_{1-4} alkyl, aryl-C_{1-4} alkoxy, aryloxy, SO_2C_{1-4} alkyl;

T is H;

halogen;

aryl;

aryl-C_{1-4} alkyl; or

aryloxy;

unless X is N in which case R^2 is absent

R^3 and R^4 are each independently selected from H, halogen, C_{1-4} alkyl, cyano, CF_3, OC_{1-4} alkyl, aryloxy, arylC_{1-4}alkoxy, C_{3-10} cycloalkoxy, carboxy, carbonamido, -CO-, -CO_2H, -NH_2, NH-C_{1-4} alkyl, aryl, hydroxy, -SO_2NH_2, -SO_2NHC_{1-4} alkyl, -C_{1-4} alkyl-OH;

X is C or N;

W is C or N, provided that both X and Y are not N;

Y is C or N

m is 1, 2, or 3;
n is 1, 2, or 3; and
the sum of m and n is 2, 3, 4, 5, or 6.

19. (original) A compound as claimed in claim 18 wherein R^1 is H; C_{1-6} alkyl optionally substituted with 1 or 2 hydroxyl groups; or aryl-C_{1-4} alkyl.

20. (original) A compound as claimed in claim 19 wherein R^1 is benzyl, p-methoxybenzyl, furanylmethyl, imidazolylmethyl, pyridinylmethyl, thienylmethyl, pyridylmethyl, N-hydroxypyridylmethyl or thiazolylmethyl.

21. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is H, R^3 is carbonamido (-$CONH_2$) or C_{1-4} alkyl-OH, and R^4 is H, C_{1-4}alkyl, CF_3, halogen or cyano.

22. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is OH, and R^3 and R^4 each independently represent H, C_{1-4}alkyl, CF_3, cyano or halogen.

23. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-Q-V-T; T is H and R^3 and R^4 each independently represent H, methyl, CF_3, chloro- or cyano-.

24. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-SO_2-V-T; V is aryl, -C_{1-12} alkyl or aryl-C_{1-12} alkyl; R_3 is H, methyl, CF_3, Cl or cyano and R^4 is H.

25. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-SO_2-V-T, V is selected from C_{1-12} alkyl, phenyl, naphthyl, thienyl, oxazolyl, isoxazolyl, or phenyl(CH=CH)–, optionally substituted with 1, 2, 3 or 4 substituents selected from:

-NO_2;
halogen;
-CF_3;

C_{1-12} alkoxy;
C_{1-12} alkylthio;
C_{1-12} alkyl;
C_{1-4} alkylsulfonyl;
-CN;
$-OCF_3$;
$-C(O)OC_{1-4}$ alkyl;
$-OCH_2CF_3$;
$-NHC(O)\ C_{1-4}$ alkyl.

26. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-SO_2-V-T$, T is selected from H; or diazole, oxazole, isoxazole, phenyl or phenoxy, optionally substituted with 1, 2, 3 or 4 substituents selected from

$-NO_2$;
halogen;
$-CF_3$;
C_{1-12} alkoxy;
C_{1-12} alkylthio;
C_{1-12} alkyl;
C_{1-4} alkylsulfonyl;
-CN;
$-OCF_3$;
$-C(O)OC_{1-4}$ alkyl;
$-OCH_2CF_3$;
$-NHC(O)\ C_{1-4}$ alkyl.

27. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-SO_2-V-T$, V is selected from 3-chloro-4-methylphenyl, 3-chlorophenyl, 3-methoxyphenyl, 4-bromophenyl, 4-methoxyphenyl, 4-methylphenyl, naphthyl, 2,4,6-trimethylphenyl, phenyl(CH=CH)-, 4-chlorophenyl, 2-chlorophenyl, 2,5-dichlorothien-3-yl, 2,5,6-trimethyl-4-methoxyphenyl, 4-methoxyphenyl, 2,3,4-trifluorophenyl, 3-cyanophenyl, 2-methoxycarbonylthien-3-yl or 4-pentylphenyl and T is H.

28. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-SO_2-V-T, T is 2-chloro-5-nitrophenoxy and V is phenyl.

29. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-C(O)-V-T wherein V is selected from

aryl;

aryl-C_{1-12} alkyl;

diaryl-C_{1-12} alkyl;

lactonyl; or

C_{1-18} alkyl optionally substituted with halogen, hydroxyl, C_{1-4} alkoxy, $C(O)OC_{1-4}$ alkyl, $OC(O)C_{1-4}$ alkyl, aryl-C_{1-4} alkoxy, aryloxy.

30. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-C(O)-V-T, and V is selected from C_{1-12} alkyl, phenyl, phenyl-C_{1-12} alkyl, diphenylmethyl, naphthyl, furanyl, thienyl, diazolyl, pyridinyl, thiazolyl, benzothienyl, fluorenyl, oxazolyl or isoxazolyl, optionally substituted with 1, 2, 3 or 4 substituents independently selected from

-NO_2;

halogen;

-CF_3;

C_{1-12} alkoxy;

C_{1-12} alkylthio;

C_{1-12} alkyl;

C_{1-4} alkylsulfonyl;

-CN;

-OCF_3;

-$C(O)O$-C_{1-4} alkyl;

-OCH_2CF_3.

31. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-C(O)-V-T, T is selected from

H;

halogen; or

diazole, oxazole, isoxazole, phenyl, phenoxy or benzodioxanyl optionally substituted with 1, 2, 3 or 4 substituents selected from

$-NO_2$;

halogen;

$-CF_3$;

C_{1-12} alkylthio;

C_{1-12} alkoxy;

C_{1-12} alkyl;

C_{1-4} alkylsulfonyl;

-CN;

$-OCF_3$;

$-C(O)O-C_{1-4}$ alkyl.

32. (original) A compound as claimed in any one of Claims 18 to 20 wherein R^2 is of formula –NH-C(O)N-V-T wherein V is selected from

C_{1-18} alkyl optionally substituted with halogen, hydroxyl, C_{1-4} alkoxy, $C(O)OC_{1-4}$ alkyl, $OC(O)C_{1-4}$ alkyl, aryl-C_{1-4} alkoxy, aryloxy;

aryl; or

aryl-C_{1-12} alkyl.

33. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-C(O)NH-V-T; V is selected from phenyl, phenyl-C_{1-12} alkyl or naphthyl optionally substituted with 1, 2, 3 or 4 substituents selected from

$-NO_2$;

halogen;

$-CF_3$;

C_{1-12} alkylthio;

C_{1-12} alkoxy;

C_{1-12} alkyl;

C_{1-4} alkylsulfonyl;

-CN;

$-OCF_3$;

$-C(O)O-C_{1-4}$ alkyl.

34. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-C(O)O-V-T, wherein V is selected from

C_{1-18} alkyl optionally substituted with halogen, hydroxyl, C_{1-4} alkoxy, $C(O)OC_{1-4}$ alkyl, $OC(O)C_{1-4}$ alkyl, aryl-C_{1-4} alkoxy, aryloxy;

aryl; or

aryl-C_{1-12} alkyl.

35. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula –NH-C(O)O-V-T, preferably V is selected from phenyl or phenyl-C_{1-12} alkyl optionally substituted with 1, 2, 3 or 4 substituents selected from

$-NO_2$;

halogen;

$-CF_3$;

C_{1-12} alkylthio;

C_{1-12} alkoxy;

C_{1-12} alkyl;

C_{1-4} alkylsulfonyl;

-CN;

$-OCF_3$;

$-C(O)O-C_{1-4}$ alkyl; or

$-OCH_2CF_3$.

36. (original) A compound as claimed in claim 13 wherein R^2 is of formula –NH-C(O)-V-T wherein V is H, C_{1-6}alkyl, C_{3-6}cycloalkyl, aryl or aryl-C_{1-12}alkyl; and
T is H, halogen, C_{1-5}alkyl, C_{1-4}alkoxy, nitro, aryl, aryl-C_{1-4}alkyl, or aryloxy unless V is H in which case T is absent.

37. (original) A compound as claimed in claim 36 wherein V is H, C_{1-6}alkyl or C_{3-6}cycloalkyl, and
T is H unless V is H in which case T is absent.

38. (original) A compound as claimed in claim 36 wherein V is aryl or aryl-C_{1-12}alkyl, and
T is H, halogen, C_{1-5}alkyl, C_{1-4}alkoxy, nitro, aryl, aryl-C_{1-4}alkyl, or aryloxy.

39. (original) A compound as claimed in claim 38

wherein V is phenyl, pyridyl, thienyl, thiazolyl, thiadiazolyl, or phenyl-C_{1-6}alkyl; and

T is H, halogen, C_{1-5}alkyl, C_{1-4}alkoxy, nitro, aryl, aryl-C_{1-4}alkyl, or aryloxy.

40. (original) A compound as claimed in claim 13

wherein

R^1 is -H,

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio, or aryl-C_{1-4}alkyl;

R^2 is $-NH_2$, or

-NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or $-SO_2-$;

V is H, aryl, aryl-C_{1-12}alkyl, diaryl-C_{1-12}alkyl, lactonyl, or C_{1-18}alkyl optionally substituted with halogen, hydroxyl, C_{1-4}alkoxy, -C(O)OC_{1-4}alkyl, -OC(O)C_{1-4}alkyl, aryl-C_{1-4}alkoxy, aryloxy, or SO_2C_{1-4}alkyl; and

T is H, halogen, aryl, aryl-C_{1-4}alkyl, or aryloxy unless V is H in which case T is absent,

R^3 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^4 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

X is C;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are not more than two N atoms in the aryl ring and provided that at least one of W, W', Y or Y' is N;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

41. (original) A compound as claimed in claim 40 wherein

W is C;

W' is C;

Y' is C; and

Y is N.

42. (original) A compound as claimed in claim 40 wherein

W is N;

W' is C;

Y' is C; and

Y is C.

43. (original) A compound as claimed in any one of claims 40 to 42 wherein

R^2 is $-NH_2$.

44. (original) A compound as claimed in any one of claims 40 to 42 wherein

R^2 is -NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or $-SO_2-$;
V is H, aryl, aryl-C_{1-12}alkyl, diaryl-C_{1-12}alkyl, lactonyl, or C_{1-18}alkyl optionally substituted with halogen, hydroxyl, C_{1-4}alkoxy, -C(O)OC_{1-4}alkyl, -OC(O)C_{1-4}alkyl, aryl-C_{1-4}alkoxy, aryloxy, or SO_2C_{1-4}alkyl; and

T is H, halogen, aryl, aryl-C_{1-4}alkyl, or aryloxy unless V is H in which case T is absent.

45. (original) A compound as claimed in claim 44 wherein

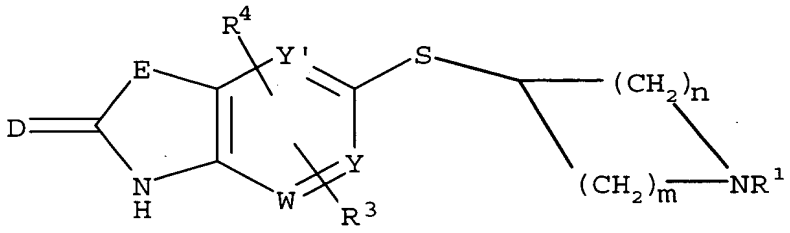
Q is $-SO_2-$ or –CO-.

46. (original) A compound as claimed in Claim 13 wherein:

R^1 is -H,

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio, or aryl-C_{1-4}alkyl;

R^2 is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein D is O or S; and

E is O, S, NR^5, or $C(R^5)_2$,

R^3 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^4 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-NH-C_{1-4}alkyl, aryl, hydroxy, $-SO_2NH_2$, $-SO_2NHC_{1-4}$alkyl, or -C_{1-4}alkyl-OH;

R^5 is each independently H or C_{1-4}alkyl;

X is C;

W is C or N;

W' is C;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring,

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

47. (original) A compound as claimed in Claim 46 wherein E is O or NR^5.

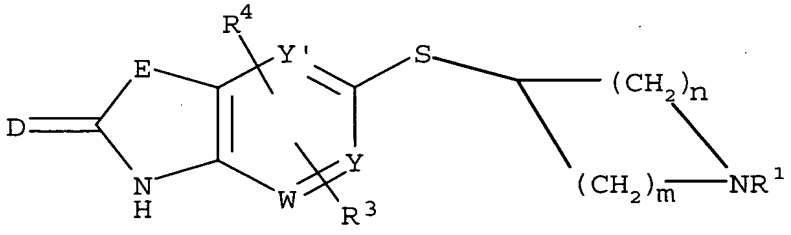
48. (original) A compound as claimed in Claim 46 or 47 wherein R^5 is/are each independently H or C_{1-4}alkyl.

49. (original) A compound as claimed in Claim 13 wherein:

R^1 is -H,

C_{1-12}alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4}alkoxy or C_{1-4}alkylthio, or aryl-C_{1-4}alkyl;

R^2 is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein D is O or S; and

E is O-CR^5_2, NR^5-CR^5_2, NR^5-CO, CR^5_2-O, CR^5_2-$S(O)_r$, CR^5_2-NR^5, CR^5_2-CR^5_2, CO-NR^5, or CR^5=CR^5;

R^3 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-NH-C_{1-4}alkyl, aryl, hydroxy, -SO_2NH_2, -SO_2NHC_{1-4}alkyl, or -C_{1-4}alkyl-OH;

R^4 is H, halogen, C_{1-4}alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF_3, OC_{1-4}alkyl, aryloxy, arylC_{1-4}alkyl, arylC_{1-4}alkoxy, C_{3-10}cycloalkoxy, carboxy, carbonamido, -CO-NH-C_{1-4}alkyl, aryl, hydroxy, -SO_2NH_2, -SO_2NHC_{1-4}alkyl, or -C_{1-4}alkyl-OH;

R^5 is each independently H, C_{1-4}alkyl;

X is C;

W is C or N;

W' is C;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

50. (original) A compound as claimed in Claim 49 wherein E is O-CR^5_2, NR^5-CR^5_2, NR^5-CO, CR^5_2-CR^5_2, or CR^5=CR^5.

51. (original) A compound as claimed in Claim 49 or 50 wherein E is O-CR^5_2, NR^5-CO, or CR^5=CR^5.

52. (currently amended) A compound as claimed in any one of Claims 49 to [[51]] <u>50</u> wherein R^5 is/are each independently H or C_{1-4}alkyl.

53. (currently amended) A compound as claimed in any one of claims 18 to [[35]] <u>20</u> wherein m is 2 and n is 1, 2 or 3.

54. (currently amended) A compound as claimed in any one of claims 18 to [[35]] 20 wherein m is 2 and n is 2.

55. (currently amended) A compound as claimed in any one of claims 18 to [[35]] 20 wherein X, Y and W are C.

56. (canceled)

57. (currently amended) A pharmaceutical composition comprising a compound as claimed in [[any one of]] claim[[s]] [[8 to 56]] 13 with a pharmaceutically acceptable diluent or carrier.